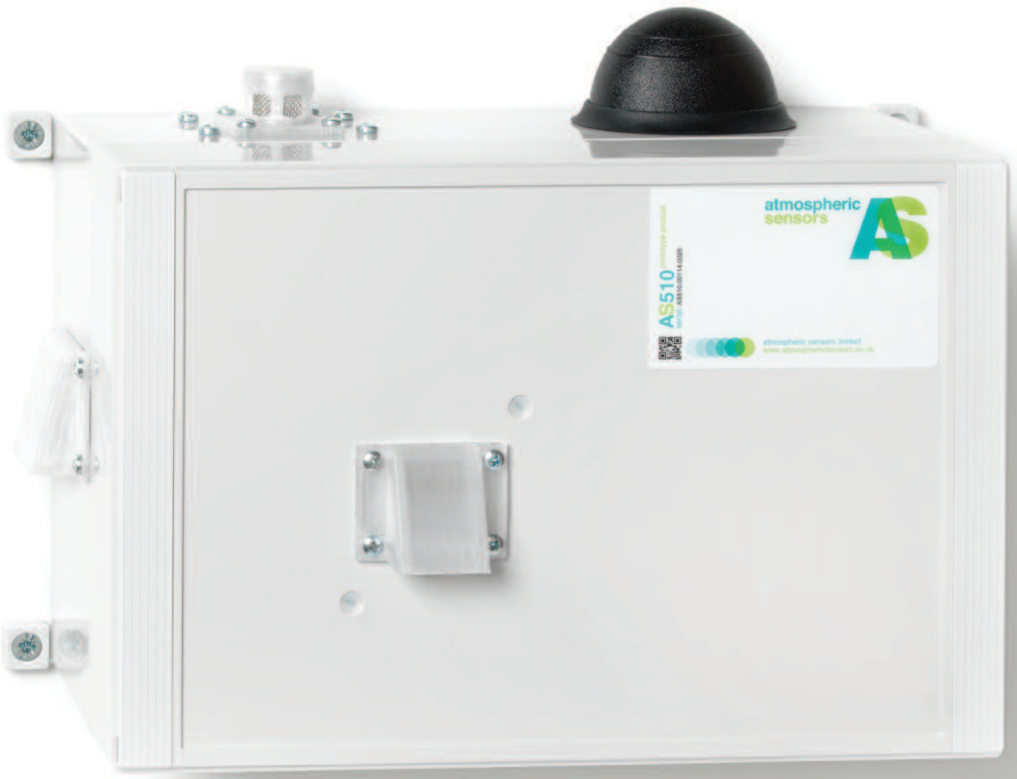
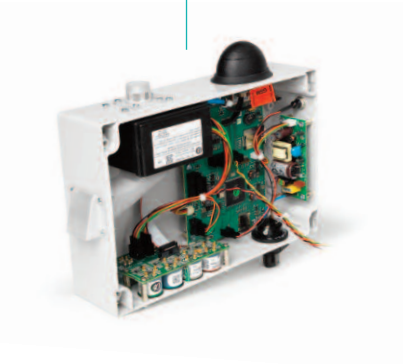
AS510

remote air quality monitor



Comprehensive and efficient area air quality monitoring at remote sites



atmospheric sensors

AS510

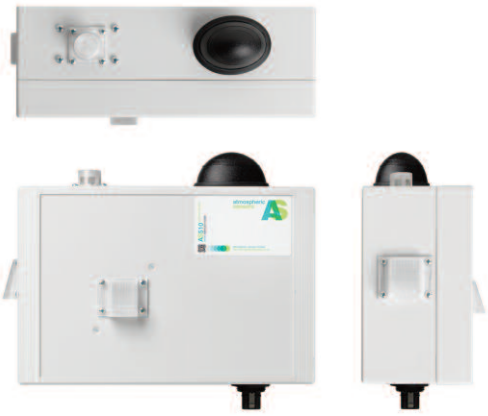
remote air quality monitor

A single unit, based around a powerful 32-bit floating-point ARM microcontroller, designed to provide a complete analysis of local air quality.

The unit deploys four electrochemical sensors, an NDIR CO_2 sensor and a laser particle monitor. These combine with a temperature and relative humidity sensor, and GPS is used for accurate location and timestamping. There is also an optional microphone to provide ambient noise information. Data is stored locally and uploaded to a central management site.

Specification

- accurate electrochemical cells (Alphasense A4) monitoring CO, NO, NO_2, and O_3 down to ppb levels. Other gases can be sensed if required (eg SO_2).
- digital NDIR CO_2 sensor (Atmospheric Sensors/Alphasense or SenseAir).
- laser optical particle counter (Alphasense) to provide PM1, PM2.5 and PM10 readings.
- PID sensor for volatile organic compounds (VOCs) (Alphasense).
- temperature and relative humidity sensor (Atmospheric Sensors).
- high-sensitivity GPS module capable of accurate location and time measurement even inside buildings.
- microphone to characterise ambient noise, based on a hardware RMS level detector.
- data can be sampled at high rates, which are normally averaged over 20 seconds, with data transmission every 15 minutes. This can be configured to suit each application.
- communication link to remote database via GPRS. This includes the ability to 'store and forward' data in times when the network is down or temporarily overloaded. The unit requires a data-capable SIM card service, which can be provided either by Atmospheric Sensors or by other providers by discussion.
- local storage on 16GB SDCard of extended results from test for later recovery and to act as a backup of results sent over the GPRS link.
- mains power supply, with waterproof connector.
- externally visible LED to indicate unit status.
- the unit may be used either indoors, or outdoors if protected by a Stevenson Screen, or similar enclosure. Wall mount brackets are supplied with each unit, permitting easy installation.



257 W x 105 D (On wall mounts) x 210 H – mains leads extend outside the height dimension. Weight 1076g.

10W max electrical load.

Atmospheric Sensors Limited
6 St George's Tower
Hatley St George
Sandy
Bedfordshire
SG19 3SH UK

enquiries@atmosphericsensors.co.uk
www.atmosphericsensors.com

atmospheric sensors